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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | | |
|--|-----------------------|----------------------|------------------------|------------------|--|--|
| 09/630,454 | 08/02/2000 | Hungming J. Liaw | 1533.0730001/SRL/TBB | 9071 | | |
| 26111 7 | 26111 7590 08/23/2004 | | | EXAMINER | | |
| STERNE, KESSLER, GOLDSTEIN & FOX PLLC | | | DEVI, SARVAMANGALA J N | | | |
| 1100 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005 | | | ART UNIT | PAPER NUMBER | | |
| | | | 1645 | | | |

DATE MAILED: 08/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | |
|---|---|---|--|--|
| | | LIAW ET AL. | | |
| Office Action Summary | 09/630,454 | | | |
| Office Action Gammary | Examiner | Art Unit | | |
| The MAILING DATE of this communication app | S. Devi, Ph.D. | 1645 | | |
| Period for Reply | ears of the cover sheet with the c | orrespondence address | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w. - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 6(a). In no event, however, may a reply be tin within the statutory minimum of thirty (30) day fill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). | | |
| Status | | | | |
| 1) Responsive to communication(s) filed on <u>03 August 2004</u> . | | | | |
| ,— | action is non-final. | | | |
| 3) Since this application is in condition for allowar | | | | |
| closed in accordance with the practice under <i>E</i> | x parte Quayle, 1935 C.D. 11, 4 | 53 O.G. 213. | | |
| Disposition of Claims | | | | |
| 4)⊠ Claim(s) <u>9 and 12-16</u> j ø /are pending in the app | lication. | | | |
| 4a) Of the above claim(s) is/are withdray | vn from consideration. | | | |
| 5)⊠ Claim(s) <u>12-16</u> jø/are allowed. | | | | |
| 6)⊠ Claim(s) <u>9</u> is/ ar e rejected. | | | | |
| 7) Claim(s) is/are objected to. | | | | |
| 8) Claim(s) are subject to restriction and/or | r election requirement. | | | |
| Application Papers | | | | |
| 9)☐ The specification is objected to by the Examine | r. | | | |
| 10)☐ The drawing(s) filed on is/are: a)☐ acce | epted or b) \square objected to by the | Examiner. | | |
| Applicant may not request that any objection to the | drawing(s) be held in abeyance. Se | e 37 CFR 1.85(a). | | |
| Replacement drawing sheet(s) including the correct | ion is required if the drawing(s) is ob | jected to. See 37 CFR 1.121(d). | | |
| 11)☐ The oath or declaration is objected to by the Ex | aminer. Note the attached Office | Action or form PTO-152. | | |
| Priority under 35 U.S.C. § 119 | | | | |
| 12) Acknowledgment is made of a claim for foreign | priority under 35 U.S.C. § 119(a) |)-(d) or (f). | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | |
| 1. Certified copies of the priority documents | s have been received. | | | |
| 2.☐ Certified copies of the priority documents | s have been received in Applicat | ion No | | |
| 3. Copies of the certified copies of the prior | ity documents have been receive | ed in this National Stage | | |
| application from the International Bureau | ı (PCT Rule 17.2(a)). | | | |
| * See the attached detailed Office action for a list | | ed. | | |
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| 1) | Ш | Notice of | References | Citea (| PI | U-892) | |
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| | | | | | | | |

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5) Notice of Informal Patent Application (PTO-152)

6) 🔲 Other: ____.

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RESPONSE TO APPLICANTS' AMENDMENT

Finality Withdrawn

1) The finality of the Office Action mailed 03/09/04 is hereby withdrawn in view of the new ground of art rejection for claim 9.

Applicants' Amendment

2) Acknowledgment is made of Applicants' amendment filed 08/03/04 in response to the Office Action mailed 03/09/04. The amendment has been entered.

Status of Claims

Claims 6-8, 10, 11 and 17-20 have been canceled via the amendment filed 03/09/04. Claims 9 and 12-16 are pending and are under examination.

Prior Citation of Title 35 Sections

4) The text of those sections of Title 35 U.S. Code not included in this action can be found in a prior Office Action.

Prior Citation of References

5) The references cited or used as prior art in support of one or more rejections in the instant Office Action and not included on an attached form PTO-892 or form PTO-1449 have been previously cited and made of record.

Rejection(s) Moot

- 6) The rejection of claims 6-8 made in paragraph 17 of the Office Action mailed 03/09/04 under 35 U.S.C. § 112, first paragraph, as containing new subject matter is most in light of Applicants' cancellation of the claims.
- 7) The rejection of claims 6-8 made in paragraph 18 of the Office Action mailed 03/09/04 under 35 U.S.C. § 112, first paragraph, as containing new subject matter, is most in light of Applicants' cancellation of the claims.
- 8) The rejection of claim 11 made in paragraph 19 of the Office Action mailed 03/09/04 under 35 U.S.C. § 112, first paragraph, as being non-enabled with regard to the scope, is most in light of Applicants' cancellation of the claim.
- 9) The rejection of claims 6-8 made in paragraph 20 of the Office Action mailed 03/09/04

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under 35 U.S.C. § 112, second paragraph, as being indefinite, is most in light of Applicants' cancellation of the claims.

10) The rejection of claims 6-8 made in paragraph 21 of the Office Action mailed 03/09/04 under 35 U.S.C. § 102(b) as being anticipated by Shijo *et al.* (US 5,077,207, already of record), is moot in light of Applicants' cancellation of the claims.

Rejection(s) under 35 U.S.C. § 102

11) Claim 9 is rejected under 35 U.S.C. § 102(b) as being anticipated by Hsiao *et al.* (*Biotechnol. Bioengineer.* 49: 341-347, 1996, already of record).

The term raffinate is interpreted in this rejection as a wastestream product from an ion-exchange operation for lysine recovery (see lines 21-23 on page 13 of the specification).

Hsiao *et al.* taught an isolated auxotrophic *Corynebacterium glutamicum* which produces at least 10 g/L of L-lysine 24 hours into the bacterial culture in a culture medium containing glucose, MgSO₄.7H₂0, K₂HPO₄, KH₂PO₄, amino acids, sugar from beet molasses, at least 4% ammonium sulfate, and additional ammonium sulfate from an autoclaved recycling broth effluent containing some L-lysine from a cation exchange for L-lysine (i.e., a wastestream product from an ion-exchange operation for lysine recovery). The production of L-lysine was evident after 20 hr. of cultivation. See 'Materials and Methods'; 'Results and Discussion'; Figures 1(a) and 2(a); and Table I and II.

Claim 9 is anticipated by Hsiao et al.

Remarks

- 12) Claim 9 stands rejected. Claims 12-16 are allowable.
- 13) Papers related to this application may be submitted to Group 1600, AU 1645 by facsimile transmission. Papers should be transmitted via the PTO Fax Center, which receives transmissions 24 hours a day and 7 days a week. The transmission of such papers by facsimile must conform with the notice published in the Official Gazette, 1096 OG 30, November 15, 1989. The RightFax number for submission of before-final amendments is (703) 872-9306. The RightFax number for submission of after-final amendments is (703) 872-9307.
- 14) Information regarding the status of an application may be obtained from the Patent

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Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAG or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.Mov. Should you have questions on access to the Private PAA system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

15) Any inquiry concerning this communication or earlier communications from the Examiner should be directed to S. Devi, Ph.D., whose telephone number is (571) 272-0854. A message may be left on the Examiner's voice mail system. The Examiner can normally be reached on Monday to Friday from 7.15 a.m. to 4.15 p.m. except one day each bi-week, which would be disclosed on the Examiner's voice mail system.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Lynette Smith, can be reached on (571) 272-0864.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.

August, 2004

S. DEVI, PH.D. PRIMARY EXAMINER